

Protecting Virginia's Environment Recent Accomplishments at DEQ

WATER PROGRAMS

Biosolids

DEQ continued regulatory oversight of all land application of treated sewage sludge, commonly referred to as biosolids, since the program was transferred from the Virginia Department of Health in 2008. In 2009 and 2010, inspectors visited over 80% of the farms where biosolids were land applied to verify compliance with law and regulations. Proposed changes to the regulations pertaining to land application of biosolids are advancing through the regulatory process in order to add additional clarity and consistency to these rules.

Water reclamation and reuse

Water reuse has steadily grown throughout the Commonwealth since Virginia's Water Reclamation and Reuse Regulation was adopted in 2008. In 2009 and 2010, money available through the American Recovery and Reinvestment Act was used to fund five new water reclamation and reuse projects that involved the installation of reclaimed water distribution lines from reclaimed water generators to end users for urban, commercial, industrial and irrigation reuses. Water reuse has provided, among other benefits, an option to reduce nutrient loads to surface waters from wastewater treatment facility discharges as well as conserving drinking water.

Water quality improvement fund grants

Since 2006, DEQ has signed 56 agreements with Virginia localities to provide grants through the Water Quality Improvement Fund for construction of nutrient removal facilities at publicly owned wastewater treatment works within the Chesapeake Bay watershed. The amount of state cost-share grant funds obligated is almost \$655 million, and a similar amount is being contributed by the localities.

General watershed permit for nutrient discharges

Virginia has issued a watershed general permit for the control of nutrient discharges in the Chesapeake Bay watershed. This permit, which took effect in 2007, places all the significant nutrient dischargers in each watershed under a single permit for permit efficiency.

Nutrient credit exchange

The Virginia Nutrient Credit Exchange Association is a non-stock corporation established by general watershed permit registrants to coordinate and facilitate participation in the exchange program by its members. Membership is



Northern Neck

Courtesy of The Northern Neck Tourism Council

voluntary, and there are more than 100 member facilities in the exchange. In 2010 watershed general permittees met six of the 10 nitrogen and phosphorus goals for the Virginia river basins.

Survey of oceanic waters

In 2010 DEQ surveyed the Atlantic Ocean for the first time. Together, DEQ and EPA staff sampled 50 sites in the Atlantic Ocean within the three mile territorial limit to determine the safety of such waters for human recreation and aquatic life. Background hydrocarbon data was also collected.

Ocean mapping and planning portal

A mapping and planning portal has been developed by the Virginia CZM Program for the Mid-Atlantic region from Virginia through New York. It will help in appropriate siting of new ocean uses such as offshore wind energy and increased shipping traffic as well as identifying and protecting key ocean habitats that support commercial and recreational fisheries, ecotourism and biodiversity.

Drought assessment tool

DEQ developed an online tool in 2008 for stakeholders to track ongoing drought conditions within Virginia. Local or regional "drought response triggers" are being integrated into the tool as they are created.

LAND PROTECTION AND REVITALIZATION PROGRAMS

Eliminating waste tires

Since 2003, DEQ contractors and a network of waste tire haulers/processors have cleaned up 1,160 tire dumps containing 7,774,200 tires at a cost of \$13.6 million. Since 2008, DEQ's Clean Sweep II Program coordinated the cleanup of 963,900 waste tires at a cost of \$1.6 million. There are approximately 125 waste tire dumps still in Virginia, containing an estimated 1,950,000 waste tires. DEQ continues to work with property owners to identify available tire cleanup options for these tire piles.

Litter prevention and recycling training manual

DEQ has developed a new training manual for litter prevention and recycling managers. Each year, local governments receive non-competitive state grants for litter and recycling programs. Each local government decides how to support anti-littering efforts and uses the grant to support these efforts. The training manual was developed to include performance measures or benchmarks to help managers assess their program efforts.

AIR PROGRAMS

NCore research monitoring station

The Office of Air Quality Monitoring completed the installation of the new National Core air quality research station at its monitoring site at the MathScience Innovation Center in Henrico County. This station is part of a national network that will be used to evaluate nationwide trends in air pollutants beyond the already extensive list of air pollutants that DEQ monitors. Some of these additional pollutants are: coarse particulate matter, nitrates and oxides of nitrogen and trace levels of carbon monoxide and sulfur dioxide.

Hopewell air toxics study

A two-year study of air toxics in the Hopewell area was completed in 2009. The risk assessment report indicated that there are three air pollutants - carbon tetrachloride, formaldehyde and acrolein - that are the primary sources of air pollutant-related risk in the Hopewell area. DEQ's Air Division will be working on lowering the overall risk level from air pollution in Hopewell by focusing on these three pollutants.



Lead air monitoring network

The Office of Air Quality Monitoring completed the installation of the lead air monitoring network for the Commonwealth. This network was required by new federal regulations that were completed in December 2010. DEQ installed and completed this network 12 months before the federal deadline.

MULTIMEDIA PROGRAMS

Enterprise Content Management

Enterprise Content Management is a means by which information can be stored electronically, either by scanning hard copies of paper documents or by managing documents created electronically. Since its implementation at DEQ, this system has proven to provide an effective and efficient means of storing, accessing and managing documents. Once documents are in electronic format, they are accessible throughout the agency, promoting telecommuting, reducing file storage space and eliminating the need for copies. Additional efficiencies have been realized by significantly decreasing the amount of staff time and effort required to fulfill Freedom of Information Act requests for documents.

Engaging citizens in habitat restoration

Virginia Coastal Program Management partners have begun engaging gardeners and landowners on the Eastern Shore in the use of native plants, and local garden centers and nurseries in raising and selling natives. *Plant ES Natives* campaign is grounded in many years of restoration and education efforts to increase the native vegetative cover critical to maintaining habitat and water quality on Virginia's lower Delmarva Peninsula.

Regional teams to promote environmental stewardship

DEQ has launched 13 regional teams across the state to foster stewardship and deliver high-quality environmental education. Ten teams are bringing together local conservation organizations and education agencies to implement stewardship projects, provide field experiences for students and educate citizens about local issues.

New Virginia Naturally partners

More than 300 new Virginia Naturally partners (an increase to nearly 900 organizations since 2006) have joined the statewide network. Monthly electronic newsletters are sent to more than 1,500 educators and community managers across Virginia to provide information and resources related to environmental education and management.

Environmental Excellence Program

A total of 450 facilities now participate in the Virginia Environmental Excellence Program, which requires implementation of environmental management systems and other practices to reduce and prevent pollution by industry, business and government agencies.